

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Richard Maliszewski

Application No.: 09/769,155

Docket Number: P10463

Filed: 1/24/2001

For: Method of Providing Secure
Content-based User Experience
Enhancement within a Content
Protection Architecture

Examiner: Norman M. Wright

Art Unit: 2134

AFFIDAVIT UNDER 37 C.F.R. 1.131

STATE OF OREGON
WASHINGTON COUNTY

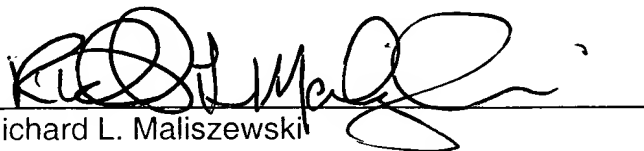
I, Richard L. Maliszewski, first being duly sworn, do hereby state that:

1. I am the inventor of the above-referenced patent application.
2. I am an engineer for Intel Corporation, the assignee of the above-referenced patent application.
3. Attached is a true copy of the original invention disclosure for this invention. This invention disclosure documents my invention. I prepared the invention disclosure on July 27, 2000. The invention disclosure was witnessed by my colleague, fellow Intel employee Lewis V. Rothrock on July 28, 2000, and submitted to my manager Dave Riss, for signature and approval on July 28, 2000. The invention disclosure establishes a date of conception of my invention no later than July 27, 2000. This date is earlier than the effective date of the cited Boykin reference (US Patent Application Publication 2002/0076049 A1), filed on December 19, 2000, and published on June 20, 2002.

4. The invention disclosure was submitted to the Intel legal department for processing according to Intel's normal business practices.
5. The patent application for my invention was filed on January 24, 2001, thereby establishing a date of constructive reduction to practice for the invention.
6. During the period from the date of submission of the invention disclosure on July 28, 2000, to the filing date of January 24, 2001, the invention disclosure was diligently processed by the inventors and other employees of Intel according to the normal business practices of Intel Corporation.
7. The invention disclosure was received by the Intel patent database group on July 31, 2000, and a file was opened for this invention on August 6, 2000.
8. The invention disclosure was reviewed at a meeting of Intel Corporation's Software and Internet Intellectual Property (IP) Committee on October 17, 2000. It was recommended for filing as a patent application and a patent docket file was opened for the patent application on October 30, 2000.
9. On January 17, 2001, I met with an Intel patent attorney, Steven Skabrat, to discuss my invention. Subsequent to this time, I diligently worked with Steven Skabrat in providing information about the invention and in reviewing drafts of the patent application until filing of the application on January 24, 2001.

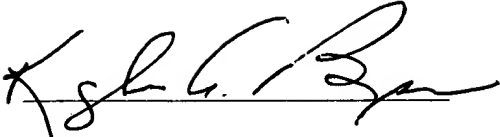
Respectfully submitted,

Dated: 2/15/2005


Richard L. Maliszewski

Sworn to and subscribed before me this _____ day of February, 2005.

09/769,155



Notary Public

My commission expires : 10/24/2006



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JUL 31 2000
PATENT DATABASE GROUP
INTEL LEGAL TEAM

ATTORNEY-CLIENT PRIVILEGED COMMUNICATION

(c) Does this invention relate to technology that is or will be covered by a SIG (special interest group)/standard/ or specification?

NO: x YES: _____ Name of SIG/Standard/Specification: _____

(d) If the invention is embodied in a semiconductor device, actual or anticipated date of tapeout? N/A

(e) If the invention is software, actual or anticipated date of any beta tests outside Intel H1 2001

7. Was the invention conceived or constructed in collaboration with anyone other than an Intel blue badge employee or in performance of a project involving entities other than Intel, e.g. government, other companies, universities or consortia? NO: x YES: _____ Name of individual or entity: _____

8. Is this invention related to any other invention disclosure that you have recently submitted? If so, please give the title and inventors: No

PLEASE READ AND FOLLOW THE DIRECTIONS ON
HOW TO WRITE A DESCRIPTION OF YOUR INVENTION

Please attach a description of the invention to this form, DATED AND SIGNED BY AT LEAST ONE PERSON WHO IS NOT A NAMED INVENTOR, and include the following information:

1. Describe in detail what the components of the invention are and how the invention works.
2. Describe advantage(s) of your invention over what is done now.
3. YOU MUST include at least one figure illustrating the invention.
If the invention relates to software, include a flowchart or pseudo-code representation of the algorithm.
4. Value of your invention to Intel (how will it be used?).
5. Explain how your invention is novel. If the technology itself is not new, explain what makes it different.
6. Identify the closest or most pertinent prior art that you are aware of.
7. Who is likely to want to use this invention or infringe the patent
If one is obtained and how would infringement be detected?

*HAVE YOUR SUPERVISOR READ, DATE AND SIGN COMPLETED FORM

DATE: 7/28/00 SUPERVISOR: [Signature]

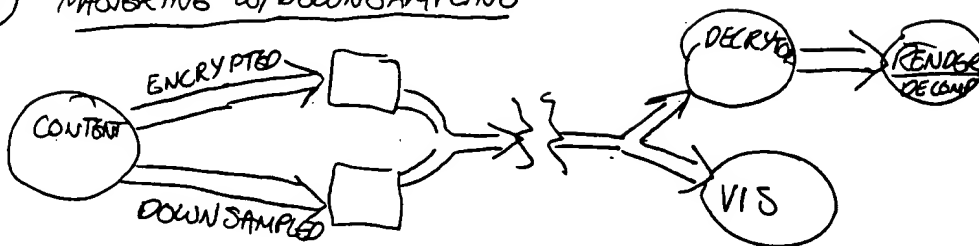
BY THIS SIGNING, I (SUPERVISOR) ACKNOWLEDGE THAT I HAVE READ AND UNDERSTAND THIS DISCLOSURE, AND RECOMMEND THAT THE HONORARIUM BE PAID

- 1) Playback devices for digital content frequently offer means of providing an enhanced end-user experience. One example of this is the large class of "visualization" plugins for many audio players, which present a view of a graphic equalizer showing the audio spectrum during playback. When the content has not been protected (encrypted), either the compressed or uncompressed stream is forwarded to a visualization module as well as to an audio renderer. That visualization module uses the stream as input to produce the extra display information. The problem is that these visualization modules are typically user-replaceable, and could therefore be used as a conduit for misappropriation of content. By requiring visualization modules to be able to handle severely downsampled streams, the high-value content need only be provided to the actual renderer. The components of this invention are therefore 1) a downsample-enabled user-experience-enhancement module 2) a means for delivering downsampled content to said module. This could be done in different ways: the module decrypting the content could perform the downsampling after decryption (and potentially, after decompression), using the protected content as source; or the content owner/provider could optionally master the content stream with unprotected downsampled stream data.
- 2) Currently, use of protected content requires disallowing visualization or other user-experience enhancements concurrent with the consumption of that content. The invention would remove the need for this restriction.
- 3) See back.
- 4) To provide enhanced experiences of high-value digital content on the PC, increasing the appeal of the PC as a media-playback device.
- 5) The current generation of visualization modules translate high-value content into a statistical view, which is by its very nature, downsampled. By moving the downsampling process into the security perimeter, visualization can be provided with no associated risk of misuse of high-value content.
- 6) None, to my knowledge.
- 7) Media playback platform providers, Realnetworks, Microsoft, etc.

Lewis Rothrock 7/29/2000
LEWIS Rothrock 686-4858

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MASTERING W/ DOWNSAMPLING



DOWNSAMPLING AT PLAYBACK

